AMENDMENTS TO THE DRAWINGS

Figure 3 in Drawing Sheets 3-46 are amended. The attached Annotated Drawing Sheets 3 and 4 show the amendments made.

Applicants also provide Replacement Drawing Sheets 3-46 which replace the original Drawing Sheets 3-46.

REMARKS/ARGUMENTS

Claims 2, 3, 7, 8, 10, 11 and 16 are being cancelled. Claims 1, 4-6, 9, 12-15 and 17 are being amended. Claims 18-25 are withdrawn. New claims 26-30 are being added. No new matter has been introduced by the amendments.

Drawings

Figure 3 is being amended such that the pages are numbered in accordance with 37 CFR 1.84(u)(1), as suggested by the Examiner.

Claim Objections

Claims 1, 9 and 17 are being amended to recite the sequence identifier "SEQ ID NO:" as suggested by the Examiner.

Claims 4-6 and 12-15 are being amended to refer to "the composition" or "the method", as suggested by the Examiner.

Claims 2, 3, 7, 8, 10, 11 and 16 are being cancelled, thereby obviating the objections with respect to those claims.

Rejections under 35 U.S.C. §112, Second Paragraph

The Examiner rejects claims 4 and 12 under 35 U.S.C. §112, Second Paragraph, because the phrase "a resolution greater than 3.0 Angstroms" is allegedly unclear. Claims 4 and 12 are being amended to clarify that the claims relate to the X-ray determination of structure coordinates to a resolution of a value equal to or less than 3.0 Angstroms, which is a higher resolution.

Claims 7, 8 and 16 are being cancelled, thereby obviating the rejection with respect to those claims.

Patent

Rejections under 35 USC \$112, First Paragraph

The Examiner rejects claims 1-16 under 35 U.S.C. §112. First Paragraph, on the ground that the claims, as presented, do not satisfy the written description or enablement requirements.

Applicants are amending the claims such that all the pending claims are drawn to compositions and methods utilizing residues 125-391 of SEQ. ID No. 1 or SEQ. ID No. 3, which are both shown in Figure 1. Applicants note that residues 29-295 of SEQ ID No: 3 correspond to residues 125-391 of SEO ID No: 1. In regard to the crystalline protein, the claims are limited to a protein consisting of residues 125-391 of SEO, ID No. 1 which Applicants did crystallize.

In view of the above amendments, Applicants submit that the pending claims overcome the Examiner's rejections. Withdrawal of the rejections to these claims under 35 U.S.C. §112, First Paragraph, is respectfully requested.

Rejections under 35 USC §102

Claim 16 is rejected as being anticipated by Sigma Chemical 1993 Catalog. In addition, Claims 1-4, 9-12 and 15-16 are rejected as being anticipated by Cheetham et al.

Applicants are cancelling claim 16. In addition, Applicants are amending the claims such that all the pending claims are drawn to compositions and methods utilizing residues 125-391 of SEQ. ID No. 1 which is shown in Figure 1.

In view of the above amendments, Applicants submit that the pending claims overcome the Examiner's rejections. Withdrawal of the rejections to these claims under 35 U.S.C. \$102 is respectfully requested.

Amendment of the Specification

Table 7 is being amended to correct an inadvertent clerical error.

Amendment of the Claims

Claim 15 is being amended to provide antecedent basis for the protein crystal.

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Claim 17 is being amended to relate to "a protein consisting of SEO ID NO: 3."

CONCLUSION

In light of the amendments and remarks set forth above, Applicants earnestly believe that they are entitled to a letters patent, and respectfully solicit the Examiner to expedite prosecution of this patent application to issuance.

Should the Examiner have any questions, the Examiner is encouraged to telephone the undersigned.

> Respectfully submitted, Takeda San Diego, Inc.

Dated: July 5, 2006

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